

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No. : 10/828,893 Confirmation No. 5851
Applicants : Ronald J. Yacger, et al.
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Examiner : Cole, Elizabeth M.
Docket No. : YAEG:1002RCE
Customer No. : 34,725

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Rule 1.132 Declaration of Galen Hartman

I, Galen W. Hartman, being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon, declares the following:

1. I am a named co-inventor of U.S. Patent Application Serial Number 10/828,893 filed on April 20, 2004.
2. All statements contained herein are made of my own knowledge and are true and that all statements made on information and belief are believed to be true.
3. I received a Bachelor of Science Degree in chemistry and physics from Southeastern State University, and two years of graduate work in organic chemistry and chemical engineering
4. I have over thirty years of experience in polymer formulations, polymer design and syntheses, polymer compositional analyses, polymer structural analyses, thermoplasticity, thermosetting, viscoelasticity, glass/viscoelasticity phase transition characterization and testing, physical and chemical properties, amorphous and crystallinity determinations, solubility and solubility prediction utilizing 3 dimensional theory.
5. I am the President and Laboratory Director of Chemical Analysis, Inc., a consulting firm specializing in activities related to polymers, where I have been employed since 1974.

Declaration of Galen Hartman

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6. I am presently or previously been active in the following professional societies and committees: American Association of Advancement of Science (AAAS), American Association of State Highway and Transportation Officials (AASHTO), American Chemical Society (ACS), American Council of Independent Laboratories (ACIL), American Institute of Chemical Engineering (AIChE), American Society for Testing and Materials (ASTM), International Conference of Building Officials (ICBO), International Council of Independent Laboratories (ICIL), National Association of Corrosion Engineering (NACE), Society of Plastics Engineering (SPE), and Uniform Building Code Officials (UBC).
7. I understand that the Patent and Trademark Office Examiner in charge of assessing patentability of the above referenced patent application has asserted that the United States Patent Number 3,798,057 teaches an amorphous cationic (chlorinated) thermoplastic polymer.
8. I am providing the present Declaration to demonstrate that United States Patent Number 3,798,057 does not disclose an amorphous cationic polymer with an overall cationic charge but in contrast discloses a thermoset resin having an additive of dispersed chlorinated particles.
9. I have reviewed United States Patent Number 3,798,057, the related United States Patent Number 3,862,280 and the Office Action mailed November 19, 2008.
10. United States Patent Number 3,798,057 discloses a thermoset resin that is impregnated with a chlorinated additive. United States Patent Number 3,798,057 uses crosslinking agents specifically polyepoxy to form a thermoset resin.
11. United States Patent Number 3,798,057 discloses in Column 1 lines 49 to 56 a composition that is a chlorinated hydrocarbon resin made with the addition of a chlorinated additive to a polymer which is then crosslinked to form a rigid resin.
12. United States Patent Number 3,798,057, Column 1 lines 49-56 states:

nated fibrous webs of the present invention are impregnated and coated with a mixture principally comprising a chlorinated hydrocarbon resin, a chlorinated additive thereto which functions as a plasticizer and/or film-forming agent, and a polyepoxy compound believed to function as a cross-linking agent imparting additional strength and rigidity to the resins and resin-coated fibrous webs. Also, the mixtures used for impregnation
13. United States Patent Number 3,798,057 discloses a thermoset resin with an insoluble discrete inert particulate of chlorinated polypropylene that is dispersed into the thermoset resin.
14. The above referenced application discloses a cationic thermoplastic composition.

15. I am aware that thermoset compositions and thermoplastic composition are different classifications of compounds with different characteristics. Specifically, in contrast to thermoplastic compositions, thermoset compositions do not have glass transition regions, do not have glass transition temperatures, do not have viscoelastic regions, do not have well defined softening points, and do not have melting points.
16. I am aware that thermoset compositions and thermoplastic composition are different classifications of compounds with different physical properties. Specifically, thermoset compositions pyrolytically decompose while thermoplastic compositions generally undergo a phase transition to a liquid phase.
17. I am aware that thermoset compositions and thermoplastic composition are different classifications of compounds with different physical properties. Specifically, thermoset compositions cannot be remolded after polymerization (i.e., chemical reactive curing), while thermoplastic compositions can be remolded after polymerization.
18. I am aware that thermoset compositions and thermoplastic composition are different classifications of compounds with different physical properties. Specifically, thermoset compositions are insoluble after polymerization (i.e., chemical reactive curing), while thermoplastic compositions are soluble in select organic solvents.
19. I assert that the composition disclosed in United States Patent Number 3,798,057 is a thermoset resin having an additive of dispersed chlorinated particles and is therefore different from the amorphous cationic thermoplastic polymer with an overall cationic charge.

Signature:

Galen W. Hartman

Name:

Mr. Galen W. Hartman

Date:

3-19-09